

Appln No. 10/682,632
Reply to Office action of July 14, 2005

REMARKS/ARGUMENTS

Claims 1 to 21 are pending in this application. Claims 1 and 7 have been amended, no claims have been cancelled or added. No new matter has been presented in making this amendment.

Rejection Under 35 U.S.C. 102(e)

The Examiner rejected claims 1, 2, 6-9, 11 and 12 under 35 U.S.C. 102(e) as being anticipated by Haugen (U.S. Patent No. 6,742,596 B2). Applicants respectfully traverse this rejection in light of the amended claims.

Independent claims 1 and 7 both require a make-up and break-out system that constantly monitors three parameters "torque, turn, and rotational speed" during the make-up procedure, and to limit and halt the make-up procedure if a predetermined "torque, turn, or rotational speed" limit has been reached. In contrast, the make-up system described in the Haugen patent is deficient on a number of grounds.

First, Haugen only discusses monitoring torque and turns, never the rotational speed of the tubular during make-up as required by amended claims 1 and 7, upon which the remaining rejected claims depend. Further, the system in Haugen is only designed to allow for a post-process analysis of a tubular connection. For example, in discussing how the system determines when a "good connection" is made, Haugen states:

The controller is preprogrammed with acceptable values for rotation and torque for a particular connection. The controller compares the rotation data and the torque data from the actual connections and determines if they are within the accepted values. If not, then the spider remains locked and closed, and the tubular can be rethreaded or some other remedial action can take place by sending a signal to an operator.

(Haugen, col.5, lines 46 to 53.)

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In short, Haugen only analyzes the torque and turns parameters after "connections" have been made to allow for "remedial" correction. Nowhere, does the Haugen patent discuss the possibility of monitoring parameters for a connection during the actual make-up process so that real-time limits can be set. This deficiency makes sense if the purpose of the Haugen device is contrasted with the purpose of the current make-up control system. Whereas the Haugen device is simply designed as an "interlock" to ensure that connections are made sufficiently to ensure that if an elevator is opened the lower tubular will not fall off the drillstem (Haugen, Abstract), the current invention is directed to a system to ensure that tubulars are not damaged as a result of cross-threading, etc. during a make-up process. (See, e.g., Specification, Background of Invention.) As a result, the current system is not just directed to whether the final connection is sufficiently strong after the fact, but whether the threading process itself is being done properly during make-up.

For both of the above-reasons, Applicants respectfully submit that the disclosure of the Haugen patent cannot be said to anticipate claims 1, 2, 6-9, 11 and 12 of the instant invention, and request reconsideration and withdrawal of this rejection.

Rejection Under 35 U.S.C. 103(a)

The Examiner also rejected claims 3-5 and 10 under 35 U.S.C. 103(a) as being unpatentable over Haugen in view of Nishikawa (U.S. Patent No. 4,885,963). Applicants respectfully traverse this rejection in light of the amended claims.

For the reasons stated above, Applicants do not believe that the Haugen patent renders the claims of the instant invention obvious, nor does the patent to Nishikawa correct the deficiencies of the Haugen reference. Unlike both the current application and the Haugen patent, the Nishikawa reference is directed to a manufacturing tool for turning, cutting, or threading pipe, not to a device for making-up and/or breaking-down connections in tubulars at a gas well. As a result, nowhere does Nishikawa ever discuss monitoring parameters such as torque, turns, and speed during a make-up or break-down process to ensure proper threading of a tubular connection as required by

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the claims of the instant invention. One of ordinary skill in the art having read both the Haugen and Nishikawa references would have had no teaching or motivation to modify the Haugen reference to obtain the make-up system and method claimed in the current application. Accordingly, Applicants respectfully request reconsideration and withdrawal of this rejection as well.

Conclusion

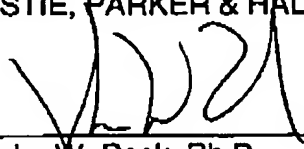
In view of the foregoing amendment and response, it is believed that the application is in condition for allowance and, accordingly, reconsideration and allowance is earnestly solicited.

If any questions remain regarding the allowability of the application, Applicant would appreciate if the Examiner would advise the undersigned by telephone.

The Commissioner is hereby authorized to charge any fees under 37 CFR 1.16 and 1.17 which may be required by this paper to Deposit Account No. 03-1728. Please show our docket number with any charge or credit to our Deposit Account.

Respectfully submitted,
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626/795-9900

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